

WORK INSTRUCTION

Title: **Chasing ICV/OCV Coupling, Fitting, and Insert Threads**

Instruction No. CH.04

Rev. 0.1, May 2004

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Approved for Use by: Michael R. Brown Effective Date: May 10, 2004

Applicable Drawings:

- 2077-500SNP (Sheets 4 and 9) - TRUPACT-II Packaging SARP Drawings
- 707-SAR (Sheets 5, 11, and 12) - HalfPACT Packaging SARP Drawings

SARP Requirements:

- None. Threads will be repaired if damaged.

Tools Required:

Note: All taps to be plug or bottom type and shall be compatible for use on stainless steel.

- 1/2-in. 20 UNF tap
- 9/16-in. 18 UNF tap
- 7/8-in. 14 UNF tap
- 1-3/16-in. 12 UN tap
- 1-3/8-in. 12 UNF tap
- 1-1/2-in. NPT pipe tap
- Tap handle
- 1/2-in. stainless steel tube brush
- 9/16-in. stainless steel tube brush
- 7/8-in. stainless steel tube brush
- 1-3/16-in. stainless steel tube brush
- 1-3/8-in. stainless steel tube brush
- 1-3/4-in. stainless steel tube brush

Spare Parts Required:

- None

Materials Required:

- Tapping fluid (Tap Magic® or equivalent type appropriate for stainless steel)
- Denatured alcohol or equivalent
- Lint-free rags
- 320 - 600 grit emery cloth
- Nickel bearing lubricant

Safety Requirements:

- Safety will be observed in accordance with site requirements.

Prerequisite Conditions:

- OCV/ICV lids, covers, and plugs must be removed as applicable to allow access to damaged threads.

Instruction Steps:

- This instruction **is not required to be attached** to the Maintenance Record but may be used as a checklist during performance of maintenance.

- ☐ OCV Seal Test Port Coupling Threads
- ☐ OCV Vent Port Coupling (Outboard) Threads

- 1.0 Clean threads using alcohol, 1-3/4-in. stainless steel tube brush, and lint-free rags.
- 2.0 Apply tapping fluid to threads being chased.
- 3.0 Insert 1-1/2-in. NPT plug tap into threads by hand, rotating clockwise until snug. Ensure tap is engaged straight.
- 4.0 Install tap handle on tap and rotate 1/4 turn clockwise, then reverse 1/4 turn to break edges.
- 5.0 Continue insertion/removal of tap until threads are repaired.
- 6.0 Remove tap.
- 7.0 Using emery cloth, lightly polish threads to remove sharp edges.
- 8.0 Clean threads to remove cuttings using alcohol, 1-3/4-in. stainless steel tube brush, and lint-free rags.
- 9.0 If threads at the bottom were not repaired using plug tap, insert 1-1/2-in. NPT bottom tap and repeat applicable parts of Steps 2 through 8 as needed.
- 10.0 Visually inspect OCV vent/test port access plug threads to ensure threads are not damaged. Replace access plug in accordance with Work Instruction CH.01 if needed.
- 11.0 Coat access plug threads with nickel bearing lubricant.
- 12.0 Insert OCV vent/test port access plug. Ensure access plug seats fully. Remove access plug.
- 13.0 Repeat applicable steps of this instruction as needed to complete job.

- ☐ OCV Seal Test Port Insert Threads
- ☐ ICV Seal Test Port Insert Threads

- 1.0 Clean threads using alcohol, 1/2-in. stainless steel tube brush, and lint-free rags.
- 2.0 Apply tapping fluid to threads being chased.
- 3.0 Insert 1/2-in. 20 UNF plug tap into threads by hand, rotating clockwise until snug. Ensure tap is engaged straight.
- 4.0 Install tap handle on tap and rotate 1/4 turn clockwise, then reverse 1/4 turn to break edges.
- 5.0 Continue insertion/removal of tap until threads are repaired.
- 6.0 Remove tap.
- 7.0 Using emery cloth, lightly polish threads to remove sharp edges.
- 8.0 Clean threads to remove cuttings using alcohol, 1/2-in. stainless steel tube brush, and lint-free rags.
- 9.0 If threads at the bottom were not repaired using plug tap, insert 1/2-in. 20 UNF bottom tap and repeat applicable parts of Steps 2 through 8 as needed.
- 10.0 Visually inspect test port plug threads to ensure threads are not damaged. Replace plug in accordance with Work Instruction CH.01 if needed.
- 11.0 Insert test port plug. Ensure plug seats fully. Remove plug.
- 12.0 Repeat applicable steps of this instruction as needed to complete job.

- ☐ OCV Vent Port Fitting Threads (Vent Port Plug)
- ☐ ICV Vent Port Insert Threads (Inner Vent Port Plug)

- 1.0 Clean threads using alcohol, 9/16-in. stainless steel tube brush, and lint-free rags.
- 2.0 Apply tapping fluid to threads being chased.
- 3.0 Insert 9/16-in. 18 UNF plug tap into threads by hand, rotating clockwise until snug. Ensure tap is engaged straight.
- 4.0 Install tap handle on tap and rotate 1/4 turn clockwise, then reverse 1/4 turn to break edges.
- 5.0 Continue insertion/removal of tap until threads are repaired.
- 6.0 Remove tap.
- 7.0 Using emery cloth, lightly polish threads to remove sharp edges.
- 8.0 Clean threads to remove cuttings using alcohol, 9/16-in. stainless steel tube brush, and lint-free rags.
- 9.0 If threads at the bottom were not repaired using plug tap, insert 9/16-in. 18 UNF bottom tap and repeat applicable parts of Steps 2 through 8 as needed.
- 10.0 Visually inspect vent port plug threads to ensure threads are not damaged. Replace plug in accordance with Work Instruction CH.01 if needed.
- 11.0 Insert vent port plug. Ensure plug seats fully. Remove plug.
- 12.0 Repeat applicable steps of this instruction as needed to complete job.

- ☐ OCV Vent Port Fitting Threads (Vent Port Cover)

- 1.0 Clean threads using alcohol, 1-3/16-in. stainless steel tube brush, and lint-free rags.
- 2.0 Apply tapping fluid to threads being chased.
- 3.0 Insert 1-3/16-in. 12 UN plug tap into threads by hand, rotating clockwise until snug. Ensure tap is engaged straight.
- 4.0 Install tap handle on tap and rotate 1/4 turn clockwise, then reverse 1/4 turn to break edges.
- 5.0 Continue insertion/removal of tap until threads are repaired.
- 6.0 Remove tap.
- 7.0 Using emery cloth, lightly polish threads to remove sharp edges.
- 8.0 Clean threads to remove cuttings using alcohol, 1-3/16-in. stainless steel tube brush, and lint-free rags.
- 9.0 If threads at the bottom were not repaired using plug tap, insert 1-3/16-in. 12 UN bottom tap and repeat applicable parts of Steps 2 through 8 as needed.
- 10.0 Visually inspect OCV vent port cover threads to ensure threads are not damaged. Replace vent port cover in accordance with Work Instruction CH.01 if needed.
- 11.0 Insert OCV vent port cover. Ensure cover seats fully. Remove cover.
- 12.0 Repeat applicable steps of this instruction as needed to complete job.

☐ ICV Vent Port Insert Threads (Outer Vent Port Plug)

- 1.0 Clean threads using alcohol, 7/8-in. stainless steel tube brush, and lint-free rags.
- 2.0 Apply tapping fluid to threads being chased.
- 3.0 Insert 7/8-in. 14 UNF plug tap into threads by hand, rotating clockwise until snug. Ensure tap is engaged straight.
- 4.0 Install tap handle on tap and rotate 1/4 turn clockwise, then reverse 1/4 turn to break edges.
- 5.0 Continue insertion/removal of tap until threads are repaired.
- 6.0 Remove tap.
- 7.0 Using emery cloth, lightly polish threads to remove sharp edges.
- 8.0 Clean threads to remove cuttings using alcohol, 7/8-in. stainless steel tube brush, and lint-free rags.
- 9.0 If threads at the bottom were not repaired using plug tap, insert 7/8-in. 14 UNF bottom tap and repeat applicable parts of Steps 2 through 8 as needed.
- 10.0 Visually inspect ICV outer vent port plug threads to ensure threads are not damaged. Replace plug in accordance with Work Instruction CH.01 if needed.
- 11.0 Insert ICV outer vent port plug. Ensure plug seats fully. Remove plug.
- 12.0 Repeat applicable steps of this instruction as needed to complete job.

☐ ICV Vent Port Insert Threads (Vent Port Cover)

- 1.0 Clean threads using alcohol, 1-3/8-in. stainless steel tube brush, and lint-free rags.
- 2.0 Apply tapping fluid to threads being chased.
- 3.0 Insert 1-3/8-in. 12 UNF plug tap into threads by hand, rotating clockwise until snug. Ensure tap is engaged straight.
- 4.0 Install tap handle on tap and rotate 1/4 turn clockwise, then reverse 1/4 turn to break edges.
- 5.0 Continue insertion/removal of tap until threads are repaired.
- 6.0 Remove tap.
- 7.0 Using emery cloth, lightly polish threads to remove sharp edges.
- 8.0 Clean threads to remove cuttings using alcohol, 1-3/8-in. stainless steel tube brush, and lint-free rags.
- 9.0 If threads at the bottom were not repaired using plug tap, insert 1-3/8-in. 12 UNF bottom tap and repeat applicable parts of Steps 2 through 8 as needed.
- 10.0 Visually inspect ICV vent port cover threads to ensure threads are not damaged. Replace cover in accordance with Work Instruction CH.01 if needed.
- 11.0 Insert ICV vent port cover. Ensure cover seats fully. Remove cover.
- 12.0 Repeat applicable steps of this instruction as needed to complete job.

Verification Requirements:

- 1.0 Work performed is described on Maintenance Record.
- 2.0 Work Instruction is listed on the Maintenance Record.